## Thomas Nelson, F.R.S.E. By W. Scott Dalgleish, M.A., LL.D.

(Read December 19, 1892.)

Thomas Nelson, the head of the publishing house of Thomas Nelson & Sons, died at his residence, St Leonard's, Edinburgh, on October 20th, 1892-within two months of completing his seventieth year. He was educated at the High School of Edinburgh; and when he was seventeen years of age he joined his father's business, which was that of a bookseller and publisher, carried on partly at the quaint old shop which stood till a few years ago at the head of the West Bow, and partly in the Gordon Mansion-house on the Castle Hill. His business faculty was rapidly developed, for in 1844, when he was barely twenty-two, he was entrusted with the organisation of the London branch. Two years later, the business was removed from the Castle Hill to new premises at Hope Park. Some years before that, Thomas Nelson, senior, the head of the firm, had been laid aside by illness; and the task of founding the extensive printing and publishing establishment at Hope Park was undertaken by his two sons, William and Thomas, who were comparatively young men. In this they succeeded so well that they brought to themselves fortune as well as fame.

When the Hope Park premises had been in existence for upwards of thirty years, and had been extended to the utmost capacity of the available ground, and when the business in its many and varied departments was in full career in Edinburgh, London, and New York, it received a sudden check from the occurrence of the disastrous fire of 1878. This seeming calamity, however, turned out to be a blessing in disguise; for it enabled the firm to make a fresh start at Parkside Works, in magnificent premises, conveniently arranged, and furnished with the latest and most approved forms of machinery. There, during the last fourteen years, the business has been carried on under the most favourable conditions, and with ever-increasing prosperity.

Enough has been said, for the present occasion, of the history of the firm with which Thomas Nelson was identified. Something may now be added as to his characteristics as a man of business, and as a man.

From his earliest years he showed a distinct and remarkable turn for mechanics. Both in bookbinding and in presswork, he devised many ingenious contrivances which are now generally adopted by printers and bookbinders. His greatest achievement in this department, however, was his invention, about the year 1850, of a rotary printing-press, with curved stereotype plates fixed on cylinders, and with a continuous web of paper. A working model of his machine, made by the engineers at Hope Park under his direction, was exhibited in the London International Exhibition of 1851, and attracted a great deal of attention; and the same model was again seen at work in the Edinburgh Exhibition of 1886.

The essential points of a rotary press are : (1) Stereotype plates cast in curved form; (2) a continuous web of paper; (3) a serrated knife to cut the paper into sheets as delivered from the machine. In these three particulars, the Nelson Press was unquestionably the original of all the rotary presses now in use for newspaper work.

Long before Mr Nelson took up the subject, the problem of rotary printing had engaged the attention of inventors, but it had not been solved. In 1790 William Nicholson of London patented a machine which anticipated many of the features of the modern press—in particular, the impression roller, and the distributing rollers on the ink-plate. But these features belong rather to the cylinder printing machine than to the rotary press. The only point in Nicholson's specifications bearing on the rotary press was that the "block, forme, plate, assemblage of types, or original," was to be placed on the face of one of his cylinders. Unfortunately, Nicholson never made a machine in conformity with his patent. That was done twenty-one years later by Friedrich Koenig, whose machine, patented in 1811, was the original of the impression-cylinder machines now universally used for book printing, but did not include the proposed type cylinder.

The latter idea was first realised in Applegath's machine of 1848, which was used for several years in *The Times* office. In this case the cylinder bearing the formes of type was vertical, and the paper in sheets was fed in by hand from eight platforms.

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This was the position of the problem in 1850, when Mr Thomas Nelson invented his rotary press. Now, the points in which the Nelson Press went beyond all previous inventions were: (1) That its cylinders were covered not with types but with stereotype plates cast in a curved mould; (2) that the paper was in the form of a continuous web, and passed automatically through the machine; (3) that it had a serrated knife sunk into the face of one of the impression cylinders, for the purpose of cutting the paper into sheets. It was also a perfecting machine, printing both sides of the paper at one operation. These are what I have called the essentials of a rotary press, and they appeared in the Nelson Press for the first time.

The invention did not pass without notice. When the working model was exhibited in London in 1851, it was referred to in all the principal newspapers, and it was minutely described (with drawings) in Cassell's *Illustrated Exhibitor* (1852). Probably the reason why the plan of the Nelson Press was not at once adopted was, that it was suggested for the printing of books, for which it is admitted not to be well adapted. Its special applicability to newspaper work had not then been realised, though it was not improbably suggested by the exhibition of the machine. In the Hoe machine, with which *The Times* superseded the Applegath in 1858, the type formes were still affixed to the cylinder, only that cylinder was horizontal instead of being vertical. The paper also was fed-in in sheets from ten separate platforms. There was as yet no web.

The first machine made on the model of the Nelson Press was that of Marinoni of Paris, but even that was not in the first instance a web machine. The reel of paper, however, was soon added, and in its completed form, as patented in this country in 1872, the machine was an obvious copy of the Nelson Press, and indeed that was scarcely denied by the inventors. Since that time, the rotary press has been brought to a marvellous state of perfection in the "Walter Press," and in the "Hoe Double-web Press"; and while I, of course, admit that these machines contain many improvements and refinements that were not dreamed of in 1850, I think I am entitled to claim that the three essentials of these and of all rotary machines—namely, plates cast in the curve, a web of paper, and a serrated knife—were all found in the Nelson Press, as it was exhibited in 1851, and were there in combination for the first time.

Mr Nelson could never be induced to lay claim to the invention, and I believe he did not patent it. It was with difficulty that he was induced to allow the original model to be exhibited in the Edinburgh Exhibition of 1886. He did not care about the matter on personal grounds; but he was anxious that, as Edinburgh has the credit of introducing stereotyping in the British Islands, so Edinburgh should have the credit of having produced the first rotary printing-machine in the world.

Mr Nelson's fertile mind was always generating fresh ideas, many of which were turned to practical account in his business, and especially in his school-book work. Though not a professed man of letters, he had remarkable facility in writing for the young in a manner that arrested attention. His first school-books were edited by himself; and to the last he continued to write lessons and to project new books. Considering the thousands (I might say the millions) of school-books issued from his press during the last quarter of a century, it would be difficult to exaggerate the extent of his influence on the youth of the country. Though not a professed linguist, he had original views about the origin and development of language, and especially about grammar, which received the approval of distinguished scholars. Though not a professed scientist, he developed new ideas in connection especially with geography and map-making, which were endorsed by eminent specialists like Sir John Herschell.

He was a man of indefatigable energy, with a great capacity and an insatiable appetite for work. When a new idea had taken hold of him, he could not rest till he had carried it out. It possessed his whole mind, and in favour of it everything else had to be laid aside for the time. To this power of concentration much of his success in business was due. Much also was due, however, to his sound judgment, and to his possession in a remarkable degree of what he called the publisher's instinct. The projecting and the working out of new schemes gave him the keenest enjoyment. Difficulties only gave spur to his intent and zest to his labour; and if he was not too much elated by success, neither was he easily daunted by failure.

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Perhaps the most striking instance of his resolution and his fearless mettle occurred on the occasion of the great fire already referred to. The total destruction of buildings so costly, so convenient, and so handsome, would have paralysed most men; but Thomas Nelson was not thus easily dismayed. On the day following the night of the fire, and while it was still smouldering, he took possession of the desk of the present writer in an adjoining house in Hope Park Terrace, and sent off thence telegrams and letters to England, France, and America, ordering new printing presses and other machines. At the same time, he arranged with architects and builders for the erection of a series of brick sheds on his own ground at St Leonard's, for the reception of these machines, which sheds formed the nucleus of the new Parkside Works. He also made arrangements with the leading printers in Edinburgh for the immediate production of new stock from the stereotype plates which had fortunately been saved. That the business, in spite of the fire, was carried on with scarcely an appreciable break, was due entirely to his enterprise and resource, which scarcely fell short of being heroic. So true is it that "In the reproof of chance lies the true proof of men."

Thomas Nelson was very little of a public man. He was a keen politician, but he seldom appeared on political platforms; and though a staunch Free Churchman, he avoided Church Courts. He knew that his strength lay in his business, and he wisely confined himself to that; but that did not prevent him from taking a deep and earnest interest in public affairs, or in religious, scientific, and educational movements. With such movements he frequently showed his sympathy in the form of handsome subscriptions, as in the case of the erection of the new Royal Infirmary, and of the new University buildings. He was a remarkable member of a remarkable family, which has done much to enhance the fame of Edinburgh in connection with its most characteristic industry, and to which Edinburgh, and indeed Scotland, is indebted for signal examples of personal worth of public spirit, and of patriotism.